

Listing of Claims

The following listing of, claims will replace all prior versions, and listings, of claims in the subject application:

Claims 1-14 (canceled).

15. (new) An optical disk data-writing method comprising the steps of:

(a) generating a data-writing reference clock signal used to obtain a data-writing timing upon recording data to the optical disk;

(b) generating a predetermined sector synchronizing signal from said data-writing reference clock signal;

(c) reading address information indicating a position on the optical disk from data recorded on the optical disk so as to demodulate the address information into a predetermined synchronizing signal;

(d) detecting a displacement between a phase of said sector synchronizing signal and a phase of said synchronizing signal; and

(e) controlling a data-writing upon performing an additional recording to the optical disk by controlling a revolution of the optical disk dynamically according to said displacement.

16. (new) The method as claimed in claim 15, further comprising increasing a servo response dynamically to a motor revolving the optical disk, when said displacement surpasses a predetermined value.

17. (new) The optical disk method as claimed in claim 15,

further comprising increasing a servo response dynamically to a motor revolving the optical disk, when said displacement surpasses the displacement detected last time by step (d).

18. (new) The optical disk method as claimed in claim 16, further comprising decreasing said increased servo response back to a previous degree thereof, when said displacement becomes lower than a predetermined reference value.

19. (new) The optical disk method as claimed in claim 17, further comprising decreasing said increased servo response back to a previous degree thereof, when said displacement becomes lower than a predetermined reference value.

20. (new) The optical disk method as claimed in claim 16, further comprising decreasing said increased servo response back to a previous degree thereof, when a predetermined period has elapsed since said servo response was increased in step (e).

21. (new) The optical disk method as claimed in claim 17, further comprising decreasing said increased servo response back to a previous degree thereof, when a predetermined period has elapsed since said servo response was increased in step (e).

22. (new) The optical disk method as claimed in claim 16, further comprising decreasing said increased servo response back to the previous degree thereof, when a predetermined amount of data has been recorded to the optical disk since said servo response was increased in step (e).

23. (new) The optical disk method as claimed in claim 17, further comprising decreasing said increased servo response back to the previous degree thereof, when a predetermined amount of

data has been recorded to the optical disk since said servo response was increased in step (e).

24. (new) An optical disk method recording information on a recordable optical disk including address information indicating a position of a part of the optical disk having not recorded any data yet, and reproducing information from the optical disk, the method comprising:

- a reference clock signal generating step generating a data-writing reference clock signal used to obtain a data-writing timing upon recording data to the optical disk;

- a synchronizing signal generating step generating a predetermined sector synchronizing signal from said data-writing reference clock signal;

- a data demodulating step reading address information indicating a position on the optical disk from data recorded on the optical disk so as to demodulate the address information into a predetermined synchronizing signal;

- a displacement detecting step detecting a displacement between a phase of said sector synchronizing signal and a phase of said synchronizing signal; and

- a data-writing control step controlling a data-writing upon performing an additional recording to the optical disk by controlling a speed of writing data to the optical disk according to said displacement.

25. (new) The optical disk method as claimed in claim 24, further comprising performing the displacement detecting step again after decreasing said speed, when said displacement surpasses a predetermined value.

26. (new) The optical disk method as claimed in claim 24, further comprising performing the displacement detecting step

again after decreasing said speed, when said displacement surpasses the displacement detected last time by said displacement detecting step.

27. (new) The optical disk method as claimed in claim 25, wherein said data-writing control step starts the additional recording to the optical disk, when said displacement becomes lower than a predetermined reference value.

28. (new) The optical disk method as claimed in claim 26, wherein said data-writing control step starts the additional recording to the optical disk, when said displacement becomes lower than a predetermined reference value.